N.D. #2 6/3/02

10205.033
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	:	Art Unit:
Allen et al.	:	Examiner:
Serial No.:	:	Date: January 25, 2002
Filed: January 25, 2002	:	
For: *Analog Voice Activity Detector for Telephone*		

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER OF PATENTS AND TRADEMARKS; BOX Patent Application WASHINGTON, D.C. 20231, ON: JAN 25, 2002

Date of Deposit

Paul F. Wille 1-25-2002

Signature Date

DISCLOSURE STATEMENT UNDER RULE 56

Honorable Commissioner of Patents and Trademarks,
Washington, D.C. 20231

SIR:

It is respectfully requested that the art listed below be considered in the examination of the subject application and made of record therein. A copy of the art listed below is enclosed.

4,610,023	discloses (FIG. 5(A)) a speech detection circuit
September 2, 1986	that relies upon an input signal exceeding a first
Noso et al.	threshold (1000–1) or a second threshold (1000–2) for predetermined times and producing square waves (FIGS. 5(B), 5(C)) representative of those times.

4,720,862 . . . . . January 19, 1988 Nakata et al.	discloses (FIG. 3) detecting speech by comparing calculated normalized residual power with two thresholds α_1 and α_2;
4,879,745 . . . . . Arbel November 7, 1989	discloses (FIG. 2) a control circuit that compares signal power, noise level, and echo in the microphone and line input for selecting one or the other;
4,976,287 . . . . . Reesor et al. January 3, 1989	discloses (FIG. 2) a circuit for comparing the peak amplitude and noise level in the microphone and line input and selecting one or the other;
5,418,848 . . . . . Armbrüster May 23, 1995	discloses (FIG. 2) an evaluation circuit that includes counter 11 that counts up during periods of double talk and down during periods without double talk and coupling a non-linear filter into the line out when the count reaches a predetermined number;
5,598,466 . . . . . Graumann January 28, 1997	discloses (FIGS. 7, 11, 12) a plurality of calculations that are performed to detect speech;
5,692,042 . . . . . Sacca November 25, 1997	discloses (FIG. 1) hysteresis (154) in a transmit/receive evaluation circuit;

5,764,753 . . . . . McCaslin et al. June 9, 1998	discloses (FIG. 3) an utterance detector including counter 120 controlled by power estimate circuit 82 and absolute value circuit 117;
5,867,574 . . . . . Eryilmaz February 2, 1999	discloses (FIG. 2) a method for detecting voice activity employing a plurality of calculations;
6,138,040 . . . . . Nicholls et al. October 24, 2000	discloses (FIG. 3) a method for detecting voice by comparing signal energy to calculated average background noise;
6,212,273 . . . . . April 3, 2001 Hemkumar et al.	discoses (FIG. 3) processing signal S_{in} from a microphone input and comparing the results with a plurality of thresholds;
6,282,176 . . . . . August 28, 2001 Hemkumar	discloses (FIG. 3) processing signal S_{in} from a microphone input and comparing the results with a plurality of thresholds;

It is respectfully submitted that the invention as disclosed and claimed in the above-identified application is not disclosed or suggested by the prior art listed above.

Respectfully submitted,

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